

As the corresponding table for 1896, on page 488 of the Summary and volume for that year, contained a clerical error the following is to be substituted for it:

Movement of areas of high and low pressures for 1896.

| Month. | High areas. | | | | Low areas. | | | |
|------------------------|-------------|-----------------|----------------|-----------|------------|-----------------|----------------|-----------|
| | By paths. | | By days. | | By paths. | | By days. | |
| | No. | Movement. | No. | Movement. | No. | Movement. | No. | Movement. |
| January..... | 10 | Miles. 6,817 | Miles. 48.8 | 21,880 | 9 | Miles. 5,435 | Miles. 28.0 | 21,880 |
| February..... | 7 | 4,447 | 34.5 | 20,200 | 14 | 8,331 | 50.0 | 25,599 |
| March..... | 8 | 4,512 | 39.0 | 22,400 | 10 | 6,593 | 42.0 | 26,760 |
| April..... | 6 | 3,036 | 26.0 | 18,430 | 9 | 5,282 | 36.5 | 20,380 |
| May..... | 7 | 3,941 | 32.0 | 18,530 | 10 | 5,070 | 41.5 | 19,960 |
| June..... | 7 | 3,905 | 44.5 | 24,470 | 9 | 4,520 | 35.0 | 20,350 |
| July..... | 7 | 3,734 | 22.0 | 11,950 | 11 | 6,502 | 38.5 | 22,550 |
| August..... | 6 | 3,234 | 39.0 | 21,850 | 10 | 6,517 | 34.0 | 22,860 |
| September..... | 7 | 4,148 | 39.0 | 22,900 | 11 | 6,531 | 39.0 | 24,380 |
| October..... | 10 | 5,244 | 44.0 | 23,530 | 9 | 4,593 | 35.0 | 18,060 |
| November..... | 8 | 3,907 | 22.5 | 18,810 | 8 | 6,491 | 25.5 | 25,230 |
| December..... | 8 | 4,754 | 32.5 | 18,390 | 12 | 9,171 | 48.0 | 31,690 |
| Sums..... | 88 | 49,639 | 421.5 | 281,260 | 121 | 76,591 | 468.0 | 285,250 |
| Mean daily velocity... | 564 | | 549 | | 695 | | 612 | |
| Mean hourly velocity.. | 23.5 | | 22.9 | | 28.8 | | 25.5 | |

TEMPERATURE.

The mean annual temperature at the surface of the ground is approximately shown by the isotherms on Chart I or by the individual figures given in Table I.

The lowest annual averages within the United States were: Williston, 38.8; Moorhead, 39.2; Bismarck and Duluth, 39.5 each.

The highest averages were: Key West, 77.2; Jupiter, 74.1; Tampa, 72.2; Corpus Christi, 70.7; Galveston, 70.2.

The mean annual temperature was above the normal at 101 stations, below at 20, and normal at 12.

The extreme temperatures of the year, or the absolute maxima and minima, are given in Table I and are shown by the isotherms on Chart II. The absolute range of temperature during the year is easily obtained by comparing the full and dotted lines on the same chart.

Maximum temperatures equaling or exceeding 105 occurred at Shreveport, Topeka, Abilene, Phoenix, Yuma, Walla Walla, Redbluff, Sacramento, and Fresno.

Minimum temperatures of -25 or lower occurred at Duluth, Moorhead, Bismarck, Williston, Minneapolis, St. Paul, Huron, and Havre.

The only portions of the country not visited by frost, assuming that frost does not occur with air temperatures above 32°, were the southern end of the peninsula of Florida and the coast line of southern California.

The large annual ranges of temperature were, as usual, in North Dakota and the Northern Slope, viz: Havre, 140°; Bismarck, 138°; Williston, 136; and Moorhead, 129°. The smallest annual ranges were: Key West, 40°; Eureka, 52°; and San Diego, 53°.

The accumulated departures of average monthly temperatures from the normal values are given in Table III. There has been a steadily accumulating deficiency in temperature throughout the Pacific Coast, middle, and southern Plateau regions, amounting to 8° at the end of the year; the northern Slope and North Dakota temperatures also diminished. In other regions there was a steady increase of positive departures, the maximum being in the Gulf and Lake regions.

MOISTURE.

The mean temperature of the dew-point and the mean relative humidity are given in Table I.

The mean temperature of the wet-bulb thermometer has been given for each month, and the average for the year can be easily inferred from Table I, as it is approximately midway between the temperature of the dew-point and the temperature of the air.

The total quantity of moisture in the atmosphere for the current year can be found by the table on pages 539-540 of the Annual Summary for 1894, and does not differ to any important extent from the figures there given for that year.

Evidently, the total rainfall during any year depends upon some other factor than the mere presence of moisture in the air; there is almost always enough moisture present but other conditions may be unfavorable.

PRECIPITATION.

The total fall of rain and melted snow for the calendar year, at regular Weather Bureau and Canadian stations, is presented on Chart III.

In 1894 precipitation was below average in every district east of the Rocky Mountains; in 1895 there was an excess of precipitation in the southern and middle Slopes, but elsewhere between the Rocky Mountains and the Atlantic seaboard there was a marked deficiency. In 1896 there was an excess of rainfall in the extreme Northwest, the upper Mississippi Valley, the Missouri Valley, and the northern and southern Slopes. The year 1897 opened with heavy rains in the lower Mississippi Valley, Tennessee, Alabama, and adjoining regions, and it seemed as if the period of diminished rainfall had come to a close. The rainfall of May was about average, except in the Gulf States, Arkansas, Missouri, and upper Mississippi valleys. The June rainfall was generally below the average, but in July unusually heavy rains fell throughout New England, the upper Lake Region, upper Mississippi Valley, Florida, and portions of the Ohio Valley and the Middle and South Atlantic States. By the middle of August a drought had set in over practically all of the territory east of the Rocky Mountains, which was not broken in some localities until about the 1st of November, and the year ended as one of generally deficient rainfall.

The stations having the largest deficiencies during 1897 are: Galveston, Tex., 19.44 inches; New Orleans, La., 17.05 inches; Raleigh, N. C., 16.94 inches; Wilmington, N. C., 16.66 inches. The stations having the largest excesses are: Jupiter, Fla., 29.09 inches; Fort Canby, Wash., 12.88 inches; New Haven, Conn., 9.98 inches.

The fall of snow for the so-called snow year, namely, from July 1 to June 30, inclusive, is given in the Annual Report of the Chief of the Weather Bureau.

The accumulated departures of the total monthly precipitation from the normal values are shown in Table IV, from which it appears that the total annual precipitation was normal in one district, above the normal in 6, and below in the remaining 14. As in previous years, the greatest deficiency exists in the west Gulf States and lower Mississippi Valley. Precipitation has been below normal in this region since 1890. The deficit during 1897 has been steadily increasing in the Middle and South Atlantic regions, east and west Gulf, upper and lower Lake, Missouri, and upper Mississippi valleys, but a notable excess has accumulated in the Florida Peninsula.

WIND.

The prevailing direction of the wind, namely, that which occurred most frequently at 8 a. m. and 8 p. m., seventy-fifth meridian time, is given in Table I. The annual resultant wind deduced from all the 8 a. m. and 8 p. m. observations of direction, without taking into account the velocity of the wind, is given in Table V; this computation is equivalent to